

{In Archive} Re: Albuquerque regional aquifer / Kirtland AFB fuel spill modeling

Tara Hubner to: Scott Ellinger

10/31/2011 11:49 AM

Cc: Laurie King

From: Tara Hubner/R6/USEPA/US

To: Scott Ellinger/R6/USEPA/US@EPA
Cc: Laurie King/R6/USEPA/US@EPA

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Scott.

I can help you with finding a lot of the info you need for the modeling. Both KAFB and New Mexico post the fuel spill documents on their websites and KAFB has a public records database that contains even more documents. Bill Hurlbut in WQ was helping me with getting sampling data for Albuquerque drinking water wells so I'm sure he can help us with getting well logs and such.

Tara Hubner, P.G. Environmental Scientist

EPA Region 6 1445 Ross Ave, Ste 1200 Dallas, TX 75202 Multimedia Planning and Permitting Division (6PD) Federal Facilities Section 214-665-7246

-----Scott Ellinger/R6/USEPA/US wrote: -----

To: Tara Hubner/R6/USEPA/US@EPA From: Scott Ellinger/R6/USEPA/US

Date: 09/26/2011 10:22AM

Subject: Re: Albuquerque regional aquifer/Kirtland AFB fuel spill

modeling

Hi Tara,

Lets talk about it when you are here. Modeling tends to get long and involved so its good to explore the idea first. I'm just finishing up a project thats taken about 2 years, for example.

Tara Hubner---09/22/2011 05:32:06 PM---Scott, You may have heard about it already, but Kirtland AFB in Albuquerque had an aviation gas and

From: Tara Hubner/R6/USEPA/US To: Scott Ellinger/R6/USEPA/US@EPA Cc: Laurie King/R6/USEPA/US@EPA

Date: 09/22/2011 05:32 PM

Subject: Albuquerque regional aquifer/Kirtland AFB fuel spill modeling

Scott,

You may have heard about it already, but Kirtland AFB in Albuquerque had an aviation gas and jet fuel (JP-4 and JP-8) leak which has resulted in a substantial free-phase and dissolved phase plume. The EDB (from the av gas) extends the furthest of all the contaminants. The use of av gas was phased out in 1975, so the leak was quite old. The below grade line leakage along the offloading rack was discovered in 1999 during pressure testing of the fuel system. NMED has estimated that the spill was approximately 8 million gallons.

The City of Albuquerque has some water well fields less than a mile from the plume. The VA Hospital and KAFB have water wells near the plume.

I asked Laurie if it might be possible to perform some modeling of the aquifer and the plume to get an idea of how the water wells may be affecting the flow and estimate how long til it reaches the wells. I assume the Air Force's contractor is doing some modeling, but it may be good for us to model it also to help out the City.

Would you be interested in doing this modeling? Does it seem feasible? What sort of information would you need?

Tara Hubner, P.G. Environmental Scientist

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Here is a map of the plume relative to the water wells. It's over a year old. They have more wells now, but I couldn't find a similar map with recent data. Their maps seem to always define the plume boundaries according to detections above mcl, not just detections in general. So the area of affected groundwater is actually larger that the map shows.

